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| 10/000,271 | 11/02/2001 | Thomas Ruediger | G06.006 | 9293 |
| 28062 | 7590 | 01/10/2005 | EXAMINER | |
| BUCKLEY, MASCHOFF, TALWALKAR LLC 5 ELM STREET NEW CANAAN, CT 06840 | | | PARDO, THUY N | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2165 | |
| DATE MAILED: 01/10/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/000,271

Applicant(s)

RUEDIGER, THOMAS

Examiner

Thuy Pardo

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23,25-30,32-36 and 38-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23,25-30,32-36,38 and 39 is/are rejected.
- 7) ☒ Claim(s) 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/16/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's Amendment and IDS filed on September 06, 2004 in response to Examiner's Office Action has been reviewed. Claims 22, 27, 30 have been amended and claims 24, 31, and 37 have been canceled.
2. Claims 1-23, 25-30, 32-36, and 38-40 are presented for examination.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims neither result in any physical transformation or recite a practical application within the technological arts, and are considered to merely manipulate abstract ideas. The content of these claims in and of themselves do not constitute a statutory process, machine, manufacture or composition of matter. Correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4, 7-33, and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pattison et al. (Hereinafter "Pattison") US Patent No. 5,999,936 in view of Gruenwald US Patent NO. 6,457,006.

As to claim 1, Pattison teaches the invention substantially as claimed, comprising:

determining a first value representing a difference between data specified in the data field and data specified in a respective one of the second plurality of data fields [the difference value between RECORD1A and RECORD2B, see fig. 5];

determining a second value representing a difference between data specified in the data field and data specified in a respective one of the first plurality of data fields [the difference value between RECORD1A and RECORD2B, see fig. 5]; and

determining a third value representing a difference between the first record and the second record based on the determined first and second values [the difference value between RECORD1A and RECORD2B, see category 4 of fig. 5].

However, Pattison does not explicitly teach that the record comprises a plurality of data fields although it has the same functionality of generating and storing a delta value of a record which differs from the previous record [see the abstract]. Gruenwald teaches identifying duplicate data between fields of the records in the databases [see the abstract; 720 of fig. 7].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add this feature to the system of Pattison as an essential means to increase integrity (i.e., accuracy and correctness) of data in a database system and also reduce the time of retrieving data from the database.

As to claim 2, Pattison and Gruenwald teach the invention substantially as claimed. Gruenwald further teaches determining, for each of the first plurality of data fields and respective ones of the second plurality of data fields, a fourth value based on a mean of a first value determined for one of the first plurality of data fields and a second value determined for a respective one of the second plurality of data fields; and summing the determined fourth values [see fig. 5; col. 12, lines 15-43].

As to claim 4, Pattison and Gruenwald teach the invention substantially as claimed. Pattison further identical steps performed with respect to different inputs [col. 10, lines 49-51].

As to claim 7, Pattison and Gruenwald teach the invention substantially as claimed, with exception of converting numerical data specified in the one or more of the first plurality of data fields and the second plurality of data fields to text data [inherent in the system].

As to claim 8, Pattison and Gruenwald teach the invention substantially as claimed. Pattison further specify data that is not identical to data specified in a respective field ["RD1A" and "1234" of record1 and "RD1B" and "457" of record2, see 504 of fig. 5].

As to claims 9-11, all limitations of these claims have been addressed in the analysis above, and these claims are rejected on that basis.

As to claim 12, Pattison and Gruenwald teach the invention substantially as claimed. Gruenwald further teaches receiving identification of the one or more of the plurality of data fields from a user [ab; “Account No.” of fig. 5].

As to claim 13, Pattison and Gruenwald teach the invention substantially as claimed. Gruenwald further teaches formatting the received records based on a standard format for data specified in each of the plurality of data fields [col. 9, lines 20-26; fig. 5-6].

As to claim 14, Pattison and Gruenwald teach the invention substantially as claimed. Gruenwald further teaches identifying one or more hoax records, wherein the identified one or more hoax records are not included in any of the plurality of groups of records [col. 3, lines 47-35].

As to claim 16, Pattison and Gruenwald teach the invention substantially as claimed. Gruenwald further teaches storing the second record in the data warehouse in association with an identifier identical to an identifier associated with the first record [col. 11, lines 14-51; col. 12, lines 32-59].

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As to claim 17, Pattison and Gruenwald teach the invention substantially as claimed. Gruenwald further teaches identifying a first record and a second record of a group of records as duplicates based on business rules, wherein the second record is not included in any of the plurality of groups of records [col. 10, lines 47-62; col. 11, lines 32-51; col. 12, lines 14-21].

As to claim 19, Pattison and Gruenwald teach the invention substantially as claimed. Gruenwald further teaches determining that the value representing the difference between the two records is below a threshold value [col. 11, lines 32-51; col. 12, lines 23-31].

As to claim 20, Pattison and Gruenwald teach the invention substantially as claimed. Gruenwald further determining that the value representing the difference between the two records is within a specified range of values [col. 7, lines 53 to col. 8, lines 51]; presenting the two records to a user and receiving an indication from the user that the two records are duplicate records [inherent in the system].

As to claim 27, Pattison and Gruenwald teach the invention substantially as claimed. Gruenwald further teaches storing the two records in the data warehouse in association with a same identifier [col. 17, lines 1-7].

As to claims 15, 18, 21-33, 35-39, all limitations of these claims have been addressed in the analysis above, and these claims are rejected on that basis.

Allowable Subject Matter

Claims 3, 5, 6, 34, 35, and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 3, the feature of determining the third value comprises determining a sum of the determined first values and the determined second values; and dividing the sum by two, taken together with other limitations of claim 1 was not disclosed by the prior art of record.

As to claims 5, 34, and 40, the feature of a step to determine an asymmetric spelling distance as a normalized cost for converting first input data to second input data via a sequence of operations; and wherein the step to determine the second value comprises a step to determine an asymmetric spelling distance as a normalized cost for converting second input data to first input data via the sequence of operations, taken together with other limitations of claims 1, 32, or 38 was not disclosed by the prior art of record.

Claims 6 and 35 being further limiting to claims 5 and 34 are also objected to.

Response to Arguments

4. Applicant argues that the cited references does not teach the claimed third value that represents a differences between the first record and the second record based on the determined and claimed first value and second value.

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As to point this, Examiner respectfully disagrees. Examiner believes that the combination of teaching of Pattison and Gruenwald teach this claimed limitation. Pattison teaches determining a third value (category 4 values, fig. 5) by comparing between the first record and the second record (2 input records, 502 of fig. 5; ab) that represents the common values between two input records. Gruenwald compensates Pattison's deficiency by determining different values (530 of fig. 5) between the compared data fields of the records (between 510 and 520 of fig. 5; ab).

5. Applicant's arguments filed on September 16, 2004 have been fully considered but they are not persuasive.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy Pardo, whose telephone number is (703) 305-1091. The examiner can normally be reached Monday through Thursday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

The fax phone number for the organization where this application or proceeding is assigned are as follows:

(703) 872-9306 (Official Communication)

and/or:

(703) 746-5616 *(Use this Fax#, only after approval by Examiner, for "INFORMAL" or "Draft" communication. Examiner may request that a formal/amendment be faxed directly to then on occasions).*

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Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

7. Any response to this action should be mailed to:

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Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

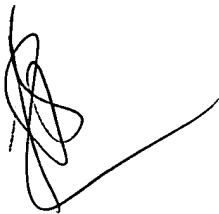
Or:

(703) 308-5359, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

January 03, 2005



THUY N. PARDO
PRIMARY EXAMINER